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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,099	03/03/2000	Tatsuro Akabane	Q58148	5409

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EXAMINER

TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 12/19/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/518,099

Applicant(s)

AKABANE ET AL.

Examiner

Douglas Q. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 9-12, 14-16, 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13 and 17-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, 13, and 17-31 drawn to apparatuses for determining the type of print jobs which are processed and stored in the printer, classified in class 358, subclass 1.13 or 1.16.
 - II. Claims 9-12, 14-16 and 32, drawn to an apparatus and method for communicating between the host computer and printer in which the host computer try to update the print information to the print job stored in the printer, classified in class 358, subclass 1.6, 1.15 or 1.18.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant case, invention I has separate utility such as determining the characteristics of the print job to be stored in the printer based on the selection mode from the host computer. Therefore, the printer has a function how to store the different type of the print data and print information.

In the instant case, invention II has separate utility such as the communication between the computer and the printer in which the printer accepts the updating print information from the

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computer and updates the print information to the given print job at the printer. See MPEP § 806.05(d).

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper; and

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Group II including claims 9-12, 14-16 and 32 are withdraw from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP 821.03.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-8, 13, 17-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kashiwazaki (US Patent No. 6,459,497 B1) and Mitsuhashi (US Patent No. 6,320,667 B1) and Tang et al. (US Patent No. 6,160,629).

As to claim 1, Kashiwazaki teaches a print system (fig. 2 shows the print system) comprising:

a computer (i.e., a host computer 3000 in fig. 2);

a printer (i.e., a printer 1000 in fig. 2) connected directly to the computer (3000 in fig. 2) or indirectly to the computer via a network (col. 6, lines 38-41);

wherein the computer preparing a PDL document and print information from the document (col. 5, line 67 to col. 6, line 4 describes that print information or a document “col. 6, lines 42-45” together with various registration information is generated from the host and supplied to the printer; and it is noted that the prepared document would be a PDL document because the printer 1001 has a emulation judgment unit for judging the type of the emulation functions of the document “col. 7, lines 58-60”, and the emulation functions are described as types of PDL documents such as PCL or Postscript “col. 1, lines 11-13”) , and outputting as a print job (since the input data from the host computer is transmitted to the printer “col. 7, lines 53-54”, the input data would be a print job because it includes the PDL document and print information), and

wherein the printer (i.e., a printer 1000 in fig. 2) comprises:

a spool control section (i.e., the input unit 18 in fig. 3) for receiving the print job spooled (col. 7, lines 15-17 describes that the CPU 12 for controlling the transmission of the input data

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from the host computer which to the input unit 18 “col. 7, lines 53-54”. Thus, the input unit that receives the print job spooled from the host computer);

a PDL processing section (i.e., the emulation judgment unit 100 in fig. 3) for processing the PDL document in accordance with the print information of the print job (col. 7, lines 58-60 describes that the unit 100 processes the PDL document by judging one of the emulation functions from the print job data in accordance with a control command);

an interpreter (i.e., the emulation interpreter 101 or 102 in fig. 3) for interpreting the PDL document (col. 7, lines 63-64 describes that either the interpreter 101 or 102 for interpreting the input data “or PDL document”) and expanding (i.e., by the development unit 103 in fig. 3 would have the same function of the expanding as the interpreter) the PDL document into a dot image (col. 8, lines 6-8 describes that the development unit 103 develops the data from the emulation interpreter into an image in a format of bitmap image “or dot image”);

an output work (i.e., a frame memory 104 in fig. 3) for storing the dot image (col. 8, lines 6-8 describes that the frame memory 104 for the one page of bitmap image generated from the development unit 103);

an output control section (i.e., the printer unit interface 16 in fig. 3) for controlling the output work (col. 7, lines 45 and 8-9 describes that the CPU 12 “in fig. 2” for controlling the entire of the printer system and controlling the output of image data to the printer engine 17. Therefore, the CPU 12 controls the printer unit interface 16 for outputting the bitmap image data from the frame memory 104 to the printer engine 17);

a printer engine (i.e., the printer unit 17 in fig. 3) for printing the dot image transmitted from the output control section (col. 8, lines 9-12 describes that the printer unit 17 performs the

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printing out of bitmap image transmitted from the frame memory 104 via the printer-unit interface 16 onto a recording sheet);

wherein the document is printed in a format specified by the computer (col. 5, line 66 to col. 6, line 7 describes that images “or a documents” is formed onto recording sheets based on a format specified from the computer such as the print information “i.e., character codes, figure information ...” and various registration information “i.e., font-pattern, overlay-pattern ...”.

However, Kashiwazaki does not teach the computer comprises a logical printer driver for making print instructions of a prepared document and preparing a PDL document and print information from the document, and spooling as a print job wherein the print information comprises storage data indicating whether the print job is to be archived in a printer and storage format data indicating in what format the print job should be archived.

Mitsuhashi, in the same field of endeavor, teaches the computer (200 in fig. 4A) comprises a logical printer driver (203 in fig. 4A) for making print instructions of a prepared document (col. 10, lines 13-18 and 22-24 describes that the printer driver 203 for making print instructions of a prepared document by providing the print instructions related to the printer, such as the drawing capability of the printer or printing resolution or printing environment setting, to the GDI and the application 201 in order to prepare the document for printing), preparing a PDL document and print information from the document (col. 12, lines 50-60 describes that the printer driver 203 processes the request data from the printing menu of the application or GDI and generates the print job or PDL code string “PDL document” including a series of command and data strings “print information from the document” “in col. 13, lines 8-10” or “col. 10, lines 20-25”), and spooling as a print job (col. 12, lines 59-63 describes that the

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PDL code string is stored at the spooler "204 in fig. 4A" for storing the print job or the PDL code string and outputting the printing processing to the printer. Therefore, the output of printing processing would be considered as a spooled print job. For simply understanding, the prior-art figure 2A and col. 10, lines 13-44 describe the similar procedure as the above procedure).

Furthermore, Tang teaches the print information comprises storage data indicating whether the print job is to be archived in a printer and storage format data indicating in what format the print job should be archived (please see fig. 4C and col. 4, lines 48-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the computer system of Kashiwazaki to include the print driver for generating the print job, which includes the PDL document and its print information wherein the print information comprises storage data indicating whether the print job is to be archived in a printer and storage format data indicating in what format the print job should be archived, spooled to the printer as taught by Mitsuhashi and Tang. The suggestion for modifying the system of Kashiwazaki can be reasoned by one of ordinary skill in the art as set forth above by Mitsuhashi because the modified computer system of Kashiwazaki would increase the efficiency of the system by providing the print driver for allowing the user to set up the print information to desired document and then the print driver for generating the PDL document including print information.

As to claims 2 and 22, Tang teaches the print information comprises storage data indicating whether the print job is to be archived in a printer and storage format data indicating in what format the print job should be archived (please see fig. 4C and col. 4, lines 48-

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50). Therefore, the print job can be updated anytime for the new print job with additional copies (col. 5, lines 1-3).

As to claims 3 and 27, Tang teaches an archive for storing a pair of PDL and print information and a pair of dot image and/or print information as the print job (please see fig. 4C and col. 4, lines 48-50).

As to claims 4-6 and 25, due to the similarities of these claims to those of claims 1 and 3, these claims are rejected as the reasons from claims 1 and 3.

As to claims 7-8 and 26, due to the similarities of these claims to those of claims 1 and 3, these claims are rejected as the reasons from claims 1 and 3.

As to claims 13, 17, 18, due to the similarities of these claims to those of claims 1 and 3, these claims are rejected as the reasons from claims 1 and 3.

As to claim 19, the combination of system teaches every feature in claim 1, and the feature of the print information comprises an attributes for the print job which is well known in the prior art when the user creates the print job.

As to claims 30 and 31, Tang teaches the storage data and storage format data are chosen by a user through an interface in the computer (fig. 4C).

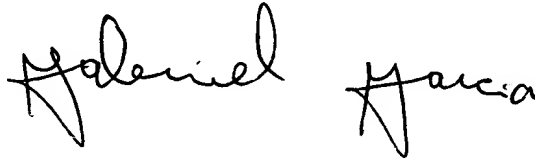
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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Dec. 06, 2003

A handwritten signature in black ink, appearing to read "Gabriel Garcia", written in a cursive style.

**GABRIEL GARCIA
PRIMARY EXAMINER**